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| 10/516,967 | 08/01/2005 | Peter C. Brazier | 9223A | 3137 |
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| MILLIKEN & COMPANY PO BOX 1926 SPARTANBURG, SC 29303 | | | EXAMINER JUSKA, CHERYL ANN | |
| | | | ART UNIT 1771 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/516,967

Applicant(s)

BRAZIER ET AL.

Examiner

Cheryl Juska

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-46 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 22-46 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/03/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>02/07</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 28-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Said claims are indefinite for the use of the phrase “as measured by a test herein defined.”

The phrase renders the claims indefinite since the text of the specification can be amended wherein the scope of said test is not fixed.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 22-46 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 29-56 of copending Application No.

10/516,861. Although the conflicting claims are not identical, they are not patentably distinct from each other because the presently claimed mat having a tufted pile textile surface is obvious over the general teaching of the copending claim limitation of a mat having a textile surface since it is well known in the art to employ tufted fabrics for mats.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 22-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,968,631 issued to Kerr in view of US 6,896,964 issued to Kvesic.

While the present invention claims priority to UK application 214103.4 having a filing date of 06/13/02, this UK application, however, does not appear to provide sufficient support for the presently claimed subject matter of voids in the elastomer backing. For this reason, at best, the effective filing date for this application is 03/12/03, the foreign priority date of application

UK 305867.4 If applicant disagrees with examiner's assessment, it is suggested that applicant cite the passage(s) in this application, which provide support for the claimed subject matter.

8. Applicant claims a dust control mat comprising a tufted pile fabric surface and an elastomer backing wherein said backing comprises elastomer crumbs, a binder, and a plurality of voids between the elastomer crumbs.

Kerr discloses a dust control floor mat comprising a tufted primary backing and at least one layer of vulcanized thermoplastic elastomer backing (abstract and col. 2, lines 35-41). A preferred elastomer backing comprises "crosslinked rubber particles dispersed through a continuous matrix of thermoplastic material (i.e., a rubber phase and a plastic phase)" (col. 4, lines 33-36). The average rubber particle size is preferably one micron or less and may be EPDM, nitrile, butyl, natural or styrene-butadiene rubber (col. 4, lines 36-40). Preferably, the floor mat comprises two elastomer backings sandwiching a stabilizing scrim (col. 2, lines 43-49). The thickness of each elastomer backing is between about 20-40 mils (about 0.51-1.02 mm) or 40-80 mils (about 1.02-2.03 mm) total (col. 2, lines 41-51). Kerr also teaches the floor mat has non-tufted boundary edges (col. 4, lines 1-23).

Thus, Kerr teaches the invention of claim 22 with the exception of the claimed (a) sand retention value, (b) presence of voids in the elastomer backing, and (c) density of elastomer backing. While Kerr teaches a continuous matrix of binder and rubber particles, it would have been readily obvious to one of ordinary skill in the art to employ larger rubber particles in order to decrease the cost of reducing said rubber size. Additionally, as one increases the particle size and decreases the binder amount, the presence of voids becomes inherent to the matrix which inherently produces a less dense, lighter weight article.

For example, Kvesic discloses ground rubber products containing a polyurethane binder suitable for floor mats (e.g., welcome mats and animal mats) (abstract and col. 1, lines 16-26). The rubber particles are preferably recycled rubber having a particle size of about 0.17 – 9.5 mm) (col. 2, lines 12-17 and col. 4, lines 4-10). Said rubber particles are preferably about 1-3 mm in size and may be combined with rubber particles of other sizes (col. 4, lines 14-23). The binder is preferably a one-part or two-part diphenylmethane diisocyanate-based (MDI) polyurethane and is present in an amount ranging from 0.5 - 25% by weight of the rubber particles (col. 2, lines 49-57 and col. 3, lines 26-53). Furthermore, dry pigment powder may be added to the rubber and binder composition (col. 4, lines 48-60). Kvesic also teaches rubber mats made of the ground rubber and binder having a plurality of “voids 34, the size of which will depends on factors including the size and shape of the treated rubber particles 20” (col. 13, lines 15-27 and Figure 3).

Thus, it would have been readily obvious to one of ordinary skill in the art substitute the rubber material of Kvesic comprising voids for the continuous matrix of the elastomer backing of Kerr since Kvesic teaches the presence and size of the voids are within the level of ordinary skill in the art. Motivation to do so would be the reduction in cost associated with employing larger rubber particle sizes and decreasing the binder amount. Therefore, the structural and chemical features of claims 22-33, 35, 38-40, and 42-44 are held to be obvious over the cited Kerr patent in view of the cited Kvesic teachings.

Regarding the claimed properties of sand retention value of the tufted fabric and density, bulk density, and deformability of the elastomer backing, it is reasonable to presume that said properties are met by the invention of Kerr as modified by the teachings of Kvesic. Support for

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said presumption is found in the use of similar materials (i.e., like tufted fabrics, like crumb rubber particles and like binder). Like materials cannot have mutually exclusive properties. The burden is upon applicant to prove otherwise.

In the alternative, it would have been readily obvious to one of ordinary skill in the art to manipulate the rubber particles size, the amount of binder, and the amount of void space in order to obtain a desired density and deformability of the finished rubber material. A decrease in density would produce a lighter weight floor mat having improved deformability. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 205 USPQ 215. [Note sections [0048] and [0054] of the PG Pub of the present application, US 2006/0008612, which teaches crumb rubber size effects the resilience of the floor mat and binder amount can be determined by routine experimentation. Also, note section [0068] which teaches the flexibility or deformability of the elastomer backing can be controlled by controlling the pressure during manufacture.]

Additionally, it would have been readily obvious to one skilled in the art to modify the tufted fabric, especially the tufted yarn and tuft density, in order to obtain a desired resistance to pile crush as measured by the sand retention value. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Therefore, claims 22-33, 35, 38-40, and 42-44 are rejected as being obvious over the cited prior art.

Regarding claims 34, 36, and 37, Kvesic teaches the rubber particles are preferably about 1-3 mm in size (col. 4, lines 14-23), which is within the scope of applicant's definition of crumb powder (section [0018] of US 2006/0008612). Additionally, the reference teaches said rubber

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particles may be combined with rubber particles of other sizes (col. 4, lines 14-23). Thus, the limitations of said claims would have been readily obvious to one of ordinary skill in the art based upon the teachings of said prior art.

With respect to claim 41, while the cited prior art fails to explicitly teach the claimed hot melt binder, it would have been readily obvious to select a hot melt binder for the binder of the Kerr and/or Kvesic inventions since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. Selecting a hot melt binder would eliminate the need to cure the final product. Therefore, claim 41 is also rejected.

9. Claims 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,968,631 issued to Kerr in view of US 6,896,964 issued to Kvesic as applied to claim 22 above and in further view of WO 96/38298 issued to Burke.

While Kerr and Kvesic fail to teach an edging strip bonded to the elastomer backing of the floor mat, said edging strips are well known in the art of floor mats. For example, Burke teaches side edging strips for a dust control mat to enhance the tear resistance thereof (abstract). Hence, it would have been readily obvious to one of ordinary skill in the art to incorporate an edging strip as disclosed by Burke in the floor mat made according to the teachings of Kerr and Kvesic. Thus, claims 45 and 46 are also rejected.

Conclusion

10. The art made of record and not relied upon is considered pertinent to applicant's disclosure.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached at 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CHERYL A. JUSKA
PRIMARY EXAMINER

cj
June 18, 2007